

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for forming an ordered structure of amphiphilic molecules, comprising:
 contacting a population of amphiphilic molecules with a interface;
 laterally compressing said population to an appropriate pressure, such that an ordered structure of said amphiphilic molecules is formed at said interface.
2. (Original) The method of claim 1, wherein said appropriate pressure is appropriate to form a two-dimensional ordered structure.
3. (Original) The method of claim 1, wherein said amphiphilic molecule comprises a protein.
4. (Original) The method of claim 1, wherein said protein is a membrane protein, a cellular receptor, an orphan receptor, receptor tyrosine kinase, an EPH receptor, an ion channel, a cytokine receptor, an multisubunit immune recognition receptor, a chemokine receptor, a growth factor receptor, or a G-protein coupled receptor.
5. (Original) The method of claim 1, wherein said amphiphilic molecule is contacted with said interface in the presence of lipids.
6. (Original) The method of claim 1, further comprising applying said proteins to said interface in proteoliposomes, liposomes, or a cellular membrane.
7. (Original) The method of claim 1, wherein said appropriate pressure is appropriate to form a three-dimensional ordered structure.
8. (Original) The method of claim 1, wherein said interface is a gas-aqueous interface.

Claims 9-54 (Cancelled).

55. (Original) A method for fabricating an ordered structure of a protein, comprising:
expressing said protein in a cell;
obtaining said protein from said cell;
applying said protein to an interface;
compressing said protein on said interface to an appropriate pressure, such that an ordered structure of said protein is formed.

56. (Original) The method of claim 55, wherein said protein is over expressed in said cell.

57. (Original) The method of claim 55, wherein said protein is a membrane protein, a cellular receptor, an orphan receptor, receptor tyrosine kinase, an EPH receptor, an ion channel, a cytokine receptor, an multisubunit immune recognition receptor, a chemokine receptor, a growth factor receptor, or a G-protein coupled receptor.

58. (Original) The method of claim 55, wherein said protein is applied to said interface in the presence of membrane lipids.

Claims 59-62 (Cancelled).

63. (New) A method for forming an ordered structure of membrane proteins, comprising:
contacting a population of membrane proteins with a gas-aqueous interface, wherein said population of membrane proteins are applied to said interface in a proteoliposome;
laterally compressing said population to an appropriate pressure, such that an ordered structure of said membrane proteins is formed at said gas-aqueous interface.